WHAT IS CLAIMED IS:

1. An internal combustion engine control apparatus comprising:

a sensor for detecting information relating to an operation state of an internal combustion engine including multiple cylinders; and

feedback control means for performing a specified feedback control on the basis of output of the sensor,

wherein the feedback control means includes

cylinder-by-cylinder variation detection means for obtaining a cylinder-by-cylinder variation value indicating variation in operation states among the cylinders of the internal combustion engine, and

control stabilization means for lowering a control gain of the feedback control or inhibiting the feedback control when the cylinder-by-cylinder variation value exceeds a specified range.

2. An internal combustion engine control apparatus according to claim 1,

wherein the feedback control means further includes cylinder-by-cylinder variation correction means for correcting the variation in the operation states among the cylinders of the internal combustion engine on the basis of the cylinder-by-cylinder variation value, and

wherein the control stabilization means lowers the control gain of the feedback control or inhibits the feedback control when

the cylinder-by-cylinder variation correction by the cylinder-by-cylinder variation correction means is not completed.

3. An internal combustion engine control apparatus comprising:

a sensor for detecting information relating to an operation state of an internal combustion engine including multiple cylinders; and

feedback control means for performing a specified feedback control on the basis of output of the sensor,

wherein the feedback control means includes

cylinder-by-cylinder variation detection means for obtaining a cylinder-by-cylinder variation value indicating variation in operation states among the cylinders of the internal combustion engine,

cylinder-by-cylinder variation correction means for correcting the variation in the operation states among the cylinders of the internal combustion engine on the basis of the cylinder-by-cylinder variation value, and

control stabilization means for lowering a control gain of the feedback control or inhibiting the feedback control when the cylinder-by-cylinder variation correction by the cylinder-by-cylinder variation correction means is not completed.

4. An internal combustion engine control apparatus according

to claim 3, wherein the control stabilization means lowers the control gain of the feedback control or inhibits the feedback control until a specified period passes even after the cylinder-by-cylinder variation correction by the cylinder-by-cylinder variation correction means is completed.

5. An internal combustion engine control apparatus according to claim 3, wherein the control stabilization means lowers the control gain of the feedback control or inhibits the feedback control until the cylinder-by-cylinder variation value is decreased into a specified range.

6. An internal combustion engine control apparatus according to claim 3,

wherein the control stabilization means performs an air-fuel ratio feedback control to control a fuel injection amount of a fuel injection valve of each of the cylinders so that an air-fuel ratio of exhaust gas detected by an exhaust gas sensor is controlled to become a target air-fuel ratio, and

wherein the control stabilization means lowers the control gain of the feedback control or inhibits the feedback control for only the cylinder in which the cylinder-by-cylinder variation exceeds a specified range.

7. An internal combustion engine control apparatus according to claim 3, wherein the cylinder-by-cylinder variation detection means obtains the cylinder-by-cylinder variation value from a

difference between one of a maximum or a minimum of an intake pressure of each cylinder of the engine and an average of the maximum or the minimum of the intake pressure of all the cylinders.

8. An internal combustion engine control apparatus according to claim 7, wherein the control stabilization means lowers the control gain of the feedback control when the difference exceeds a specified range.

9. An internal combustion engine control apparatus according to claim 8, wherein the control stabilization means lowers the control gain of the feedback control only for cylinders with respect to which the difference exceeds the specified range.

10. An internal combustion engine control apparatus according to claim 7, wherein the sensor detects an air-fuel ratio in an exhaust of the engine, and the feedback control means feedback controls fuel injection amount of the engine with the control gain.